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New River Basin Aquatic Inventory

Nongame Project Report

by
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Cooperating Agencies:
North Carolina Wildlife Resources Commission
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Introduction

The New River originates as the North and South Forks in the mountains of Watauga and Ashe Counties of Northwestern North Carolina. Another major tributary, the Little River originates in Alleghany County and flows to the New River in Southwestern Virginia. Along a 26 mile corridor of the New and South Fork New, which is state and federally designated Wild and Scenic, is the New River State Park. It is currently comprised of 9 parcels of land, each with river frontage, totaling over 1,460 acres. Three of those parcels are public access areas; two in Ashe County, and the third in Alleghany County.

In conjunction with surveys for aquatic animals at numerous State Parks across North Carolina, the Nongame and Endangered Wildlife Program of the North Carolina Wildlife Resources Commission undertook surveys for freshwater mussels, aquatic snails, crayfish, and state-listed fish in the New River basin during the period 1996-1997. The intent of these surveys was to gather information about the aquatic resources of the park and its watershed to help guide future management of the park system, categorize species distributions within the park, identify rare species occurrences, and highlight areas of significance for future conservation measures.

Methods

The surveys concentrated upon the main channel of the South and North Forks of the New River, but many tributaries were also sampled. Surveys employed various techniques depending upon the taxa being sought. Freshwater mussel surveys were accomplished by visual searches, snorkeling, and collecting relic shell material from the substrate and the streambanks. Aquatic snails were also collected by visual inspection of the various substrates including rocks and organic debris. Surveys for crayfish were accomplished by visual observation, turning rocks, dip-netting, and electroshocking with a backpack fish shocker. For each of the above taxa, our goal was to find as many different species and individuals as possible within the habitats and time available at each survey station. For example, if a survey site contained riffles, runs, and pools, then searches were conducted in each habitat type. The duration of sampling efforts at each site varied, and was recorded.

With regards to sampling for State-listed fish, initially we attempted to seine-net and identify all fish which were captured. Due to the large size and high flow of most of our sampling sites, and the large number of potentially occurring species, our strategy changed shortly after fish sampling began. Since our intent was to survey for state-listed species only; the logperch, the sharpnose darter, and the Kanawha minnow, only darters and a few other easily recognizable species were identified to the species level. For example, shiners, chubs, and many other fish were not identified to species level, but were counted in a miscellaneous category. In addition to changing the specimen identification strategy for fish, the sampling method was changed also. After initial seining attempts, a backpack electroshocker was used to sample fish. The number and duration of shocking runs varied between sampling stations, but generally sampling duration was approximately one hour, or until such time

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that no new species were being captured. On one occasion we used a specially adapted 14 foot aluminum electroshocking boat to sample fish in a portion of the New River.

In addition to species information being recorded at each survey location, notes were also made as to the habitat types, duration and method of sampling, and any other pertinent facts. Where practicable, GPS (Geographic Positioning System) positions were collected at survey sites employing a Trimble Pathfinder Basic Plus GPS unit. All of the information gathered was entered into a Dbase for Windows database and mapped using Atlas GIS.

For identification of specimens to the species level we relied upon published accounts and past experience with the various taxa. Crayfish identification relied upon Hobbs' *An Illustrated Checklist of the American Crayfishes* (1989) and Cooper and Braswell's *Observations on North Carolina Crayfishes* (1995). Aquatic snails were identified using Burch's *North American Freshwater Snails* (1989). Fish were identified with the aid of *The Freshwater Fishes of North Carolina* (Menhinick 1991) and *Freshwater Fishes of the Carolinas, Virginia, Maryland, and Delaware* (Rohde et. al. 1994). Knowledgeable individuals were also consulted regarding specimen identifications where possible.

The author wishes to acknowledge the assistance provided on this project by various individuals including Scott Marsh, who provided assistance with collection of specimens for the project, input much of the data, and produced the GIS maps for this report. Appreciation is also extended to Joseph Mickey of the North Carolina Wildlife Resources Commission for providing information and equipment, and finally to the staff of New River State Park for various assistance throughout the project.

Results and Discussion

Freshwater Mussels

Through our surveys for freshwater mussels in the New River basin we found three species of mussels: *Elliptio dilatata* (state-listed Special Concern), *Lasmigona subviridis* (state-listed Endangered), and *Cyclonaias tuberculata*. Figure 1 shows the sampling locations where freshwater mussels were found throughout the drainage. Each location is cross referenced to Table 1, which provides information about the location, the species, and the number of individuals collected at each site. In all, 32 sites were sampled for mussels. Figure 1 shows only sites at which mussels were found. Mussels were not detected in any of the tributary streams of either the North or South Fork New River, despite surveys on Helton, Potato, Elk, Prather, and Cranberry Creeks. The Little River was not specifically surveyed for freshwater mussels, although two sites were sampled for other taxa, and no mussels were observed.

A total of 1018 live mussels and mussel shells were counted during the surveys. The vast majority of those specimens were *Elliptio dilatata*. As reflected in Table 1, *E. dilatata* is rather widespread throughout the basin and is quite common at some locations. It occurs commonly in the New and South Fork New, but only a few individuals were found in the North Fork New River. The reasons

for low numbers of mussels in the North Fork are unknown. *C. tuberculata* was found at only 3 sites in the Alleghany County stretch of the New River. It was not abundant at any of the survey locations, although numerous shell fragments (not counted in Table 1) were found at the New River State Park Alleghany Access Area. Adams et. al. (1990) reported that *C. tuberculata* possibly occurred in North Carolina, and apparently it is fairly common in the New River in Virginia (J. Jones, pers. comm.). *Lasmigona subviridis* was previously known from 2 locations in the New River Basin, one on the North Fork and one on the South Fork. During this survey (see Figure 1 and Table 1) *L. subviridis* specimens or shells were found at 6 locations on the South Fork New River; however, only 8 live individuals and 2 shells were found. The majority of those were found in the stretch of the South fork near the Watauga/ Ashe County boundary, upstream from the New River State Park. No *L. subviridis* specimens were found at survey sites on the North Fork New River despite being recorded from the North Fork as recently as 1991 (Alderman 1993).

Besides gathering information about the relative abundance of each species of mussel throughout the basin, the surveys were conducted with the intent of defining the upper extent of mussel populations in both of the major forks of the New River. In the North Fork, mussels were found at the NC Highway 16 bridge crossing, but were not detected at two locations further upstream (SR 1513 and SR 1501). This indicates that mussels presently only occur from that area downstream in the North Fork of the New River. The North Fork appears to have much more suitable habitat for mussels than their current distribution and numbers reflect. Again, the reasons for that are currently unknown; however, many small, cold streams of Western North Carolina do not support mussel populations. In the South Fork New River, mussels seem to disappear from the aquatic fauna as you go upstream between the SR 1351 and SR 1331 bridges in Watauga County. In both forks, two sites were surveyed above those areas and no evidence of mussels was found, indicating the upper limits of the population distributions.

Insufficient data exist to analyze population trends for any of the mussel species found. At best it appears that *C. tuberculata* is restricted to the lower portion of the main river channel in North Carolina, and is not abundant. *L. subviridis* is not abundant anywhere in the basin in North Carolina, and none were found in the North Fork New River. The species still occurs in the South Fork New River, however low numbers of individuals indicate that populations are relatively low there as well. *E. dilatata* is the only species of mussel which occurs in significant numbers in the North Carolina portion of the New River basin. In some areas, particularly in the South Fork, where they are still quite abundant. There are also areas where that is not the case, despite the appearance of suitable habitat, such as areas of the North Fork New River.

Aquatic Snails

Five species of aquatic snails were documented in this survey of the New River basin. Snails were recorded or collected at 27 sites throughout the basin on the main channel of the North and South Forks, and tributaries as well (Figure 2). Table 2 lists the species collected or observed at each survey site and is referenced to the survey sites on Figure 2. The seep mudalia, *Leptoxis dilatata*, is currently state-listed Threatened due to its range being restricted to the New River basin (Adams et. al. 1990). While it is not found throughout the state, it is very abundant throughout the New River

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basin. In fact it was found at every survey site, and in large numbers at almost all of them (Table 2). All of the other snails identified are considered fairly common and widespread in North Carolina. Specimens in the Genus Physella could not be identified to species level, however there are only three species of Physella reported from North Carolina, two of which are believed to be fairly common (Adams et.al. 1990).

In addition to the aquatic snails documented, Table 2 includes a reference to Ancylidae and *Corbicula fluminea*. Both limpets and asian clams (an exotic species) are found widely distributed throughout the New River basin, but their inclusion in the data of this report is anecdotal.

Crayfish

Crayfish were collected by hand and by electroshocking at 27 locations throughout the New River basin. The sample sites included a number of tributaries of the New River as well as the North and South Forks (Figure 3). Table 3 provides some of the data collected at each of the sample sites, referenced to a locality on Figure 3. Three species of crayfish were identified in the surveys, Two of which are believed to be endemic to the New River basin: *Cambarus chasmodactylus* and *Orconectes* sp. B (Cooper and Braswell 1995). Both species were fairly common to abundant at 16 and 27 sites respectively. The only other species identified in this survey was *Cambarus bartonii*, which may be a species complex (Cooper and Braswell 1995), and is common in the state. Cooper and Braswell (1995) indicated that *Cambarus robustus* and *Cambarus dubius* are also known from the New River basin, however we did not find any *C. robustus* specimens, and *C. dubius* is a burrowing species for which we did not survey.

State-listed Fish

Over 3,184 fish specimens were captured by seining or electroshocking at 30 sample sites throughout the New River basin (Figure 4). As discussed previously, and as witnessed in Table 4, not all fish were not identified to the species level. Since two of our target species were darters: the logperch, *Percina caprodes* (State-listed Threatened) and the sharpnose darter, *Percina oxyrhynchus* (State-listed Special Concern), all darters were identified to the species level. The third target species for these surveys was the Kanawha minnow, *Phenacobius kanawhae* (State-listed Special Concern), which was easily recognizable. All of the other fish were classified to varying degrees depending upon the ease of identification. Some species were easily identified, while others were counted in miscellaneous categories.

Table 4 provides specific information about the capture of 9 individual logperch at 3 distinct locations. Previously this species was known in the basin from one specimen collected in Alleghany County near the confluence of Elk Creek. One individual was captured there again during this survey, however more were collected a significant distance upstream. Six individuals were captured at the Alleghany Access Area of the New River State Park and 2 more were collected even further upstream near the confluence of the North and South Forks of the New River. There is not adequate

information to be able to assess whether this indicates some kind of trend, however the logperch clearly occupies a larger portion of the New River than previously believed.

The sharpnose darter was only found at two locations during this survey, and was represented by a single individual at each site. Previously, the species had been reported at 5 sites in the South Fork New River and the Little River. Sampling was conducted at each of those sites, but no sharpnose darters were captured. Whether this represents a decline in this species is not certain. The sharpnose darter is difficult to sample due to its preference for deep swift riffles (Menhinick and Braswell 1997) and it would be difficult to determine with certainty that the present survey was exhaustive relative to this species. Based upon this survey it appears that the sharpnose darter is the rarest darter of the New River basin in North Carolina.

The Kanawha Minnow, *Phenacobius teretulus* has been recorded from 22 locations throughout the New River basin in the past. In this survey, 115 specimens were captured at 21 locations in the New River, both the North and South Forks, and in the Little River. At each of those sites, 1-25 individuals were captured (see Table 4.) Again, there is inadequate information available to assess trends on a statistical level at this time. It may be possible at some point in the future to analyze this and other data to explore population trends, however the information gathered during this survey indicated that the species remains widespread in the basin and fairly common at a number of sites. While we did not measure individual fish specimens, it was apparent that the sample specimens represented several different age classes, indicating that recent reproduction has occurred.

In addition to the three state-listed species, two other species considered "significantly rare" by the North Carolina Natural Heritage Program were also found during this survey. The Kanawha darter, *Etheostoma kanawhae* and the Tonguetied minnow, *Exoglossum laurae* were found at 10 and 1 locations respectively (see Table 4).

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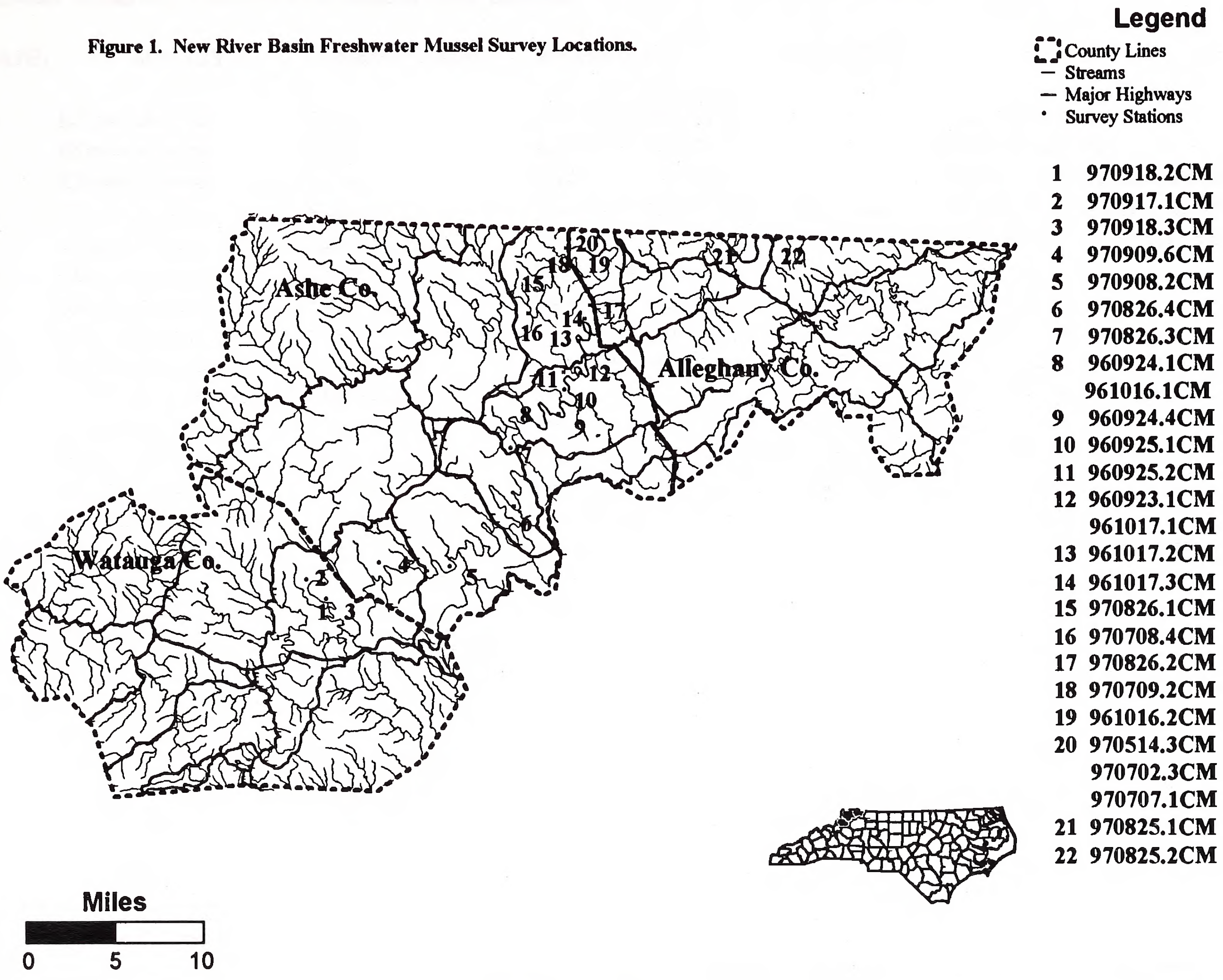
Figure 1. New River Basin Freshwater Mussel Survey Locations.



1	970918.2CM
2	970917.1CM
3	970918.3CM
4	970909.6CM
5	970908.2CM
6	970826.4CM
7	970826.3CM
8	960924.1CM 961016.1CM
9	960924.4CM
10	960925.1CM
11	960925.2CM
12	960923.1CM 961017.1CM
13	961017.2CM
14	961017.3CM
15	970826.1CM
16	970708.4CM
17	970826.2CM
18	970709.2CM
19	961016.2CM
20	970514.3CM 970702.3CM 970707.1CM
21	970825.1CM
22	970825.2CM

Table 1. Freshwater mussel data from New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
960923.1CM	*Elliptio dilatata*	Spike	South Fork New River	New River SP - US221 access area	16 shells
960923.1CM	*Elliptio dilatata*	Spike	South Fork New River	New River SP - US221 access area	58
960924.1CM	*Elliptio dilatata*	Spike	South Fork New River	New River SP - Wagoner access area to SR 1595	65 shells
960924.4CM	*Elliptio dilatata*	Spike	South Fork New River	New River SP - Wagoner access area to SR 1595	34
960925.1CM	*Elliptio dilatata*	Spike	South Fork New River	SR 1595 to New River SP-US 221 access area	3
960925.2CM	*Elliptio dilatata*	Spike	South Fork New River	SR 1602	30
961016.1CM	*Elliptio dilatata*	Spike	South Fork New River	New River SP- Wagoner access area	5
961016.2CM	*Elliptio dilatata*	Spike	South Fork New River	New River SP-Alleghany access area	11
961017.1CM	*Elliptio dilatata*	Spike	South Fork New River	New River SP-US 221 access area to Oliver House	474 shells
961017.2CM	*Lasmigona subvirdis*	Green floater	South Fork New River	Approx 1/4 mile below US 221 bridge	1 shell
961017.2CM	*Lasmigona subvirdis*	Green floater	South Fork New River	Approx 1/4 mile below US 221 bridge	1
961017.2CM	*Elliptio dilatata*	Spike	South Fork New River	Approx 1/4 mile below US 221 bridge	25
961017.3CM	*Elliptio dilatata*	Spike	South Fork New River	Next stop	64
970514.3CM	*Cyclonaias tuberculata*	Purple wartyback	New River	New River SP-Alleghany access area, lower end	1
970702.3CM	*Cyclonaias tuberculata*	Purple wartyback	New River	New River SP-Alleghany access area, lower end	2
970707.1CM	*Cyclonaias tuberculata*	Purple wartyback	New River	New River SP-Alleghany access area, lower end	2
970707.1CM	*Elliptio dilatata*	Spike	New River	New River SP-Alleghany access area, lower end	62
970708.4CM	*Elliptio dilatata*	Spike	North Fork New River	NC 16	4
970709.2CM	*Elliptio dilatata*	Spike	New River	New River SP-Oliver House access area	12 shells
970825.1CM	*Cyclonaias tuberculata*	Purple wartyback	New River	SR 1345	1 shell
970825.1CM	*Elliptio dilatata*	Spike	New River	SR 1345	6
970825.2CM	*Elliptio dilatata*	Spike	New River	SR 1407	49
970825.2CM	*Cyclonaias tuberculata*	Purple wartyback	New River	SR 1407	1 shell
970826.1CM	*Elliptio dilatata*	Spike	North Fork New River	SR 1573	2
970826.2CM	*Elliptio dilatata*	Spike	South Fork New River	SR 1560	21
970826.3CM	*Elliptio dilatata*	Spike	South Fork New River	NC16/NC 88	12
970826.4CM	*Lasmigona subvirdis*	Green floater	South Fork New River	SR 1159	1
970826.4CM	*Elliptio dilatata*	Spike	South Fork New River	SR 1159	24
970908.2CM	*Elliptio dilatata*	Spike	South Fork New River	SR 1169	9
970909.6CM	*Lasmigona subvirdis*	Green floater	South Fork New River	SR 1106	1 shell
970909.6CM	*Elliptio dilatata*	Spike	South Fork New River	SR 1106	2

Table 1 cont. Freshwater mussel data from New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
970917.1CM	*Lasmigona subvirdis*	Green floater	South Fork New River	SR 1352	3
970917.1CM	*Elliptio dilatata*	Spike	South Fork New River	SR 1352	3
970918.2CM	*Elliptio dilatata*	Spike	South Fork New River	Western-most crossing of SR 1351	1 shell
970918.2CM	*Lasmigona subvirdis*	Green floater	South Fork New River	Western-most crossing of SR 1351	1
970918.3CM	*Elliptio dilatata*	Spike	South Fork New River	SR 1351	9
970918.3CM	*Lasmigona subvirdis*	Green floater	South Fork New River	SR 1351	2

Figure 2. New River Basin Aquatic Snail Survey Locations.

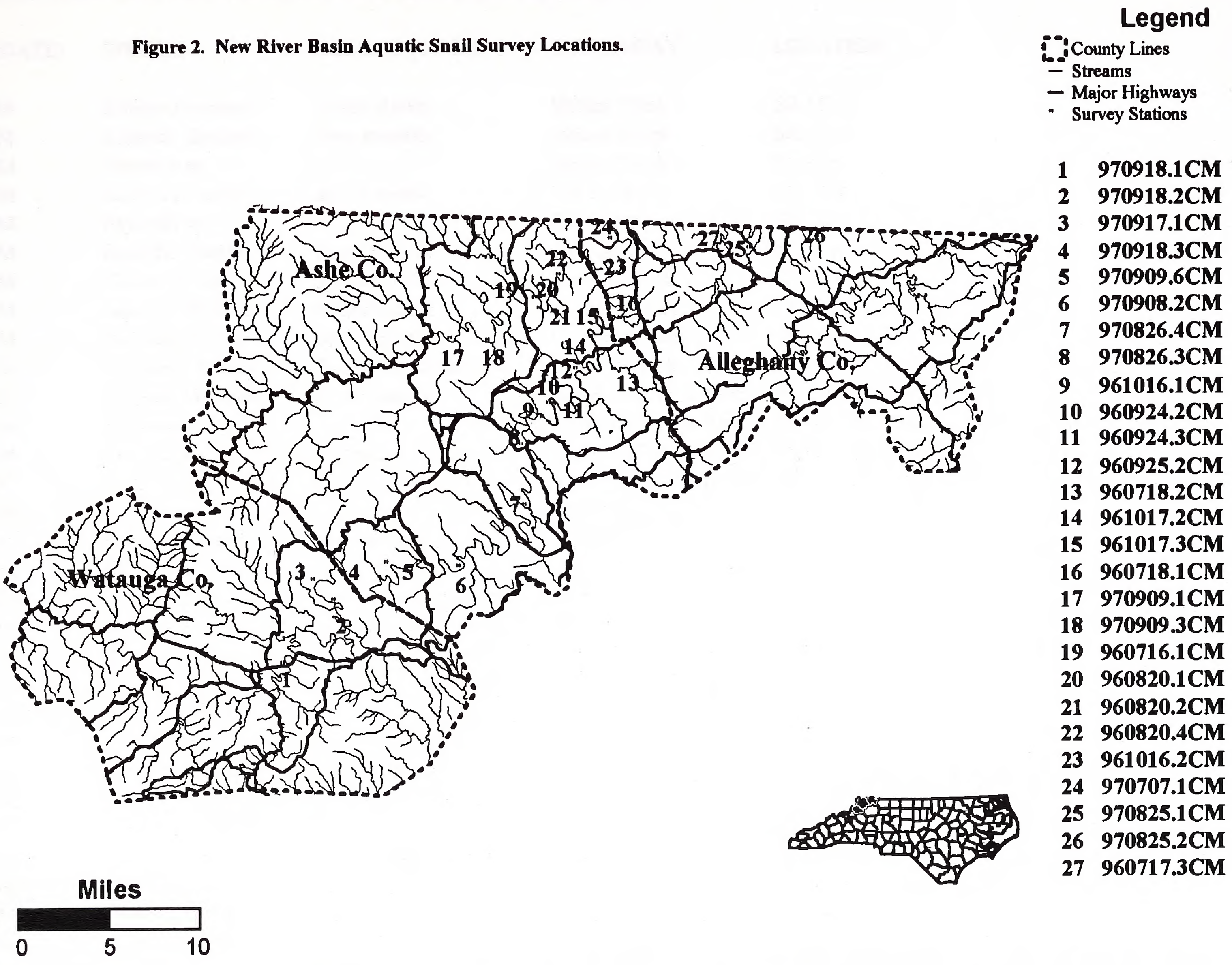


Table 2. Aquatic Snail survey data from the New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
960716.1CM	*Ellimia proxima?*	Sprite elimia	Helton Creek	SR 1539	3
960716.1CM	*Leptoxis dilatata*	Seep mudalia	Helton Creek	SR 1539	42
960716.1CM	*Physella* sp.		Helton Creek	SR 1539	1
960717.3CM	*Ellimia proxima*	Sprite elimia	Elk Creek	SR 1344	1
960717.3CM	*Physella* sp.		Elk Creek	SR 1344	3
960717.3CM	*Leptoxis dilatata*	Seep mudalia	Elk Creek	SR 1344	26
960718.1CM	*Ellimia proxima?*	Sprite elimia	Prather Creek	SR 1300	19
960718.2CM	*Leptoxis dilatata*	Seep mudalia	Cranberry Creek	SR 1603	abundant
960718.2CM	*Ellimia proxima?*	Sprite elimia	Cranberry Creek	SR 1603	1
960820.1CM	*Helisoma anceps*	Two-ridge rams horn	North Fork New River	NC 16 - SR 1552	1
960820.1CM	*Leptoxis dilatata*	Seep mudalia	North Fork New River	NC 16 - SR 1552	2
960820.1CM	*Physella* sp.		North Fork New River	NC 16 - SR 1552	9
960820.1CM	*Ancylidae*	Limpets	North Fork New River	NC 16 - SR 1552	4
960820.1CM	*Physella* sp.		North Fork New River	NC 16 - SR 1552	15
960820.2CM	*Physella* sp.		North Fork New River	NC 16 - SR 1552	6
960820.2CM	*Leptoxis dilatata*	Seep mudalia	North Fork New River	NC 16 - SR 1552	6
960820.2CM	*Ellimia proxima?*	Sprite elimia	North Fork New River	NC 16 - SR 1552	2
960820.2CM	*Helisoma anceps*	Two-ridge rams horn	North Fork New River	NC 16 - SR 1552	1
960820.3CM	*Leptoxis dilatata*	Seep mudalia	North Fork New River	NC 16 - SR 1552	abundant
960820.4CM	*Leptoxis dilatata*	Seep mudalia	North Fork New River	NC 16 - SR 1552	abundant
960820.4CM	*Helisoma anceps*	Two-ridge rams horn	North Fork New River	NC 16 - SR 1552	abundant
960820.4CM	*Physella* sp.		North Fork New River	NC 16 - SR 1552	abundant
960820.4CM	*Campeloma decisum*	Pointed campeloma	North Fork New River	NC 16 - SR 1552	
960924.2CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	New River SP - Wagoner access area to SR 1595	abundant
960924.2CM	*Campeloma decisum*	Pointed campeloma	South Fork New River	New River SP - Wagoner access area to SR 1595	2
960924.3CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	New River SP - Wagoner access area to SR 1595	abundant
960924.3CM	*Campeloma decisum*	Pointed campeloma	South Fork New River	New River SP - Wagoner access area to SR 1595	2
960925.2CM	*Corbicula fluminea*	Asian clam	South Fork New River	SR 1602	abundant
960925.2CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	SR 1602	abundant
960925.2CM	*Campeloma decisum*	Pointed campeloma	South Fork New River	SR 1602	1
961016.1CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	New River SP- Wagoner access area	abundant

Table 2 cont. Aquatic Snail survey data from the New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
961016.1CM	*Campeloma decisum*	Pointed campeloma	South Fork New River	New River SP- Wagoner access area	4
961016.2CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	New River SP-Alleghany access area	abundant
961016.2CM	*Campeloma decisum*	Pointed campeloma	South Fork New River	New River SP-Alleghany access area	2
961017.2CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	Approx 1/4 mile below US 221 bridge	19
961017.2CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	Approx 1/4 mile below US 221 bridge	
961017.3CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	Next stop	abundant
970707.1CM	*Campeloma decisum*	Pointed campeloma	New River	New River SP-Alleghany access area, lower end	1
970707.1CM	*Leptoxis dilatata*	Seep mudalia	New River	New River SP-Alleghany access area, lower end	abundant
970708.2CM	*Ellimia proxima?*	Sprite elimia	North Fork New River	SR 1573	abundant
970708.2CM	*Leptoxis dilatata*	Seep mudalia	North Fork New River	SR 1573	abundant
970825.1CM	*Leptoxis dilatata*	Seep mudalia	New River	SR 1345	abundant
970825.1CM	*Campeloma decisum*	Pointed campeloma	New River	SR 1345	
970825.2CM	*Leptoxis dilatata*	Seep mudalia	New River	SR 1407	abundant
970825.2CM	*Campeloma decisum*	Pointed campeloma	New River	SR 1407	
970826.3CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	NC16/NC 88	abundant
970826.3CM	*Ellimia proxima?*	Sprite elimia	South Fork New River	NC16/NC 88	2
970826.4CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	SR 1159	abundant
970908.2CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	SR 1169	abundant
970908.2CM	*Campeloma decisum*	Pointed campeloma	South Fork New River	SR 1169	
970909.1CM	*Leptoxis dilatata*	Seep mudalia	North Fork New River	SR 1501	abundant
970909.3CM	*Leptoxis dilatata*	Seep mudalia	North Fork New River	SR 1513	abundant
970909.6CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	SR 1106	abundant
970917.1CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	SR 1352	abundant
970918.1CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	US221/US421	1
970918.1CM	*Physella* sp.		South Fork New River	US221/US421	abundant
970918.2CM	*Physella* sp.		South Fork New River	Western-most crossing of SR 1351	6
970918.2CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	Western-most crossing of SR 1351	abundant
970918.3CM	*Leptoxis dilatata*	Seep mudalia	South Fork New River	SR 1351	abundant

Figure 3. New River Basin Crayfish Survey Locations.

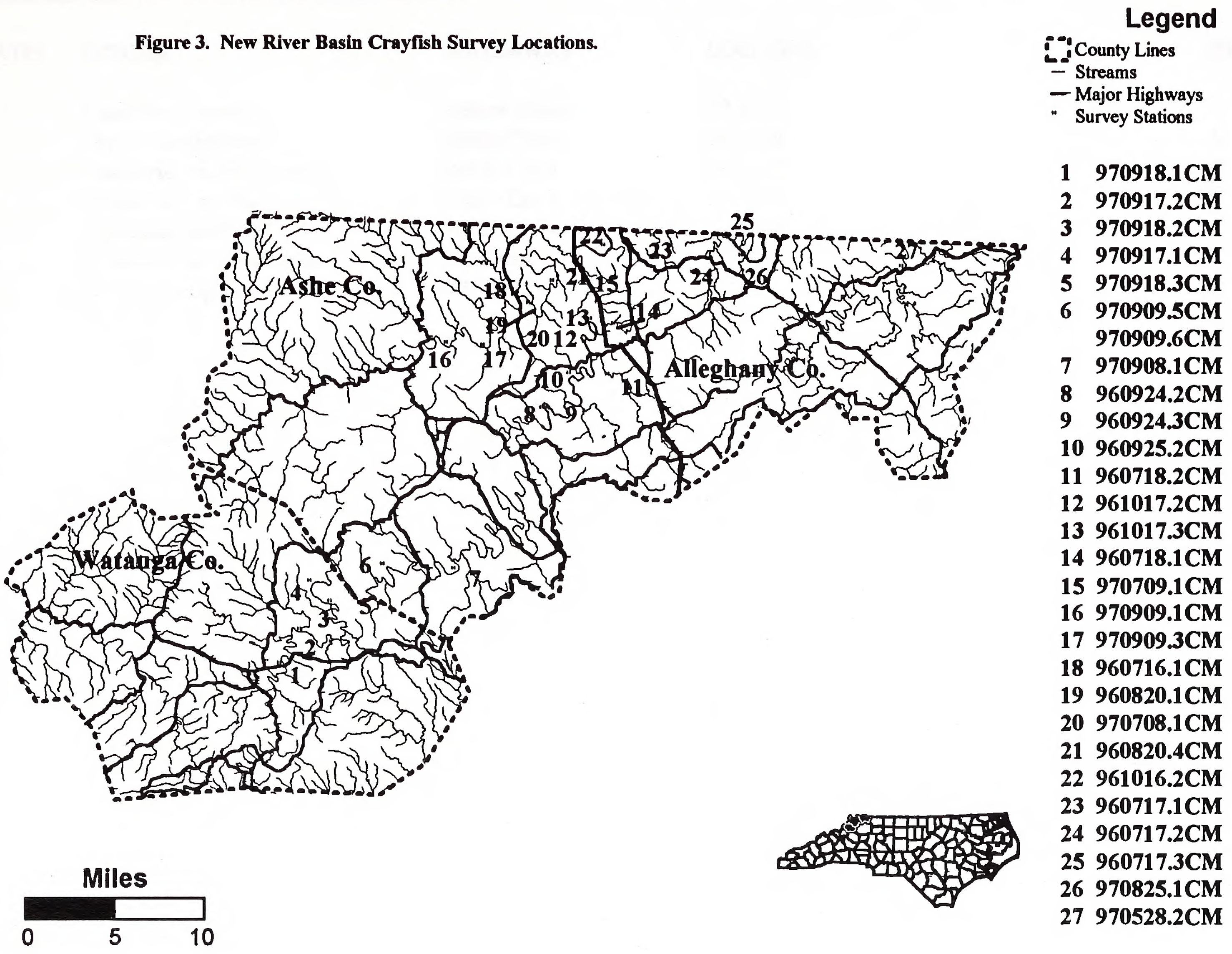


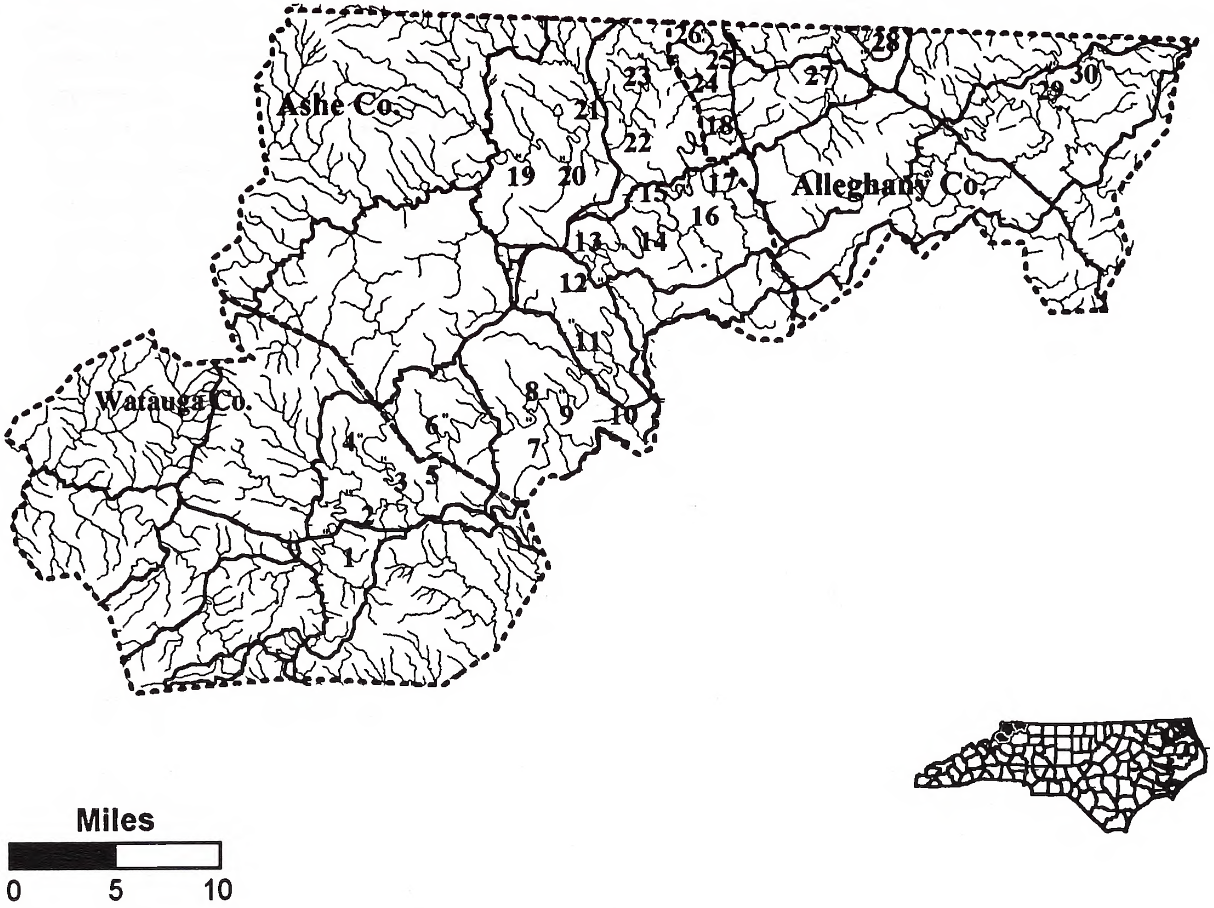
Table 3. Crayfish data from New River basin in North Carolina.

STATION(DATE)	SPECIES	WATERWAY	LOCATION	NUMBER
960716.1CM	*Cambarus bartonii*	Helton Creek	SR 1539	1
960716.1CM	*Orconectes* species B	Helton Creek	SR 1539	8
960717.1CM	*Cambarus chasmodactylus*	Potato Creek	SR 1318	7
960717.1CM	*Orconectes* species B	Potato Creek	SR 1318	2
960717.1CM	*Cambarus bartonii*	Potato Creek	SR 1318	4
960717.2CM	*Cambarus chasmodactylus*	Elk Creek	NC 93	4
960717.2CM	*Orconectes* species B	Elk Creek	NC 93	9
960717.2CM	*Cambarus bartonii*	Elk Creek	NC 93	5
960717.3CM	*Cambarus chasmodactylus*	Elk Creek	SR 1344	3
960717.3CM	*Orconectes* species B	Elk Creek	SR 1344	3
960718.1CM	*Cambarus bartonii*	Prather Creek	SR 1300	3
960718.1CM	*Cambarus chasmodactylus*	Prather Creek	SR 1300	6
960718.1CM	*Orconectes* species B	Prather Creek	SR 1300	9
960718.2CM	*Cambarus chasmodactylus*	Cranberry Creek	SR 1603	13
960718.2CM	*Orconectes* species B	Cranberry Creek	SR 1603	3
960718.2CM	*Cambarus bartonii*	Cranberry Creek	SR 1603	1
960820.1CM	*Orconectes* species B	North Fork New River	NC 16 - SR 1552	6
960820.1CM	*Cambarus sp.*	North Fork New River	NC 16 - SR 1552	1
960820.1CM	*Cambarus bartonii*	North Fork New River	NC 16 - SR 1552	1
960820.3CM	*Orconectes* species B	North Fork New River	NC 16 - SR 1552	4
960820.4CM	*Orconectes* species B	North Fork New River	NC 16 - SR 1552	abundant
960924.2CM	*Orconectes* species B	South Fork New River	New River SP - Wagoner access area to SR 1595	7
960924.3CM	*Orconectes* species B	South Fork New River	New River SP - Wagoner access area to SR 1595	2
960925.2CM	*Orconectes* species B	South Fork New River	SR 1602	7
960925.2CM	*Cambarus chasmodactylus*	South Fork New River	SR 1602	1
961016.2CM	*Orconectes* species B	South Fork New River	New River SP-Alleghany access area	10
961017.2CM	*Cambarus chasmodactylus*	South Fork New River	Approx 1/4 mile below US 221 bridge	2
961017.2CM	*Orconectes* species B	South Fork New River	Approx 1/4 mile below US 221 bridge	3
961017.3CM	*Orconectes* species B	South Fork New River	Next stop	3
970528.2CM	*Cambarus chasmodactylus*	Little River	NC 18	1
970708.1CM	*Orconectes* species B	North Fork New River	SR 1573	5

Table 3 cont. Crayfish data from New River basin in North Carolina.

STATION(DATE)	SPECIES	WATERWAY	LOCATION	NUMBER
970709.1CM	*Orconectes* species B	South Fork New River	SR 1549	3
970825.1CM	*Orconectes* species B	New River	SR 1345	3
970908.1CM	*Cambarus chasmodactylus*	South Fork New River	SR 1169	1
970908.1CM	*Orconectes* species B	South Fork New River	SR 1169	9
970909.1CM	*Orconectes* species B	North Fork New River	SR 1501	19
970909.1CM	*Cambarus chasmodactylus*	North Fork New River	SR 1501	1
970909.3CM	*Cambarus chasmodactylus*	North Fork New River	SR 1513	4
970909.3CM	*Orconectes* species B	North Fork New River	SR 1513	23
970909.3CM	*Cambarus bartonii*	North Fork New River	SR 1513	1
970909.5CM	*Orconectes* species B	South Fork New River	SR 1106	5
970909.6CM	*Cambarus chasmodactylus*	South Fork New River	SR 1106	1
970917.1CM	*Cambarus chasmodactylus*	South Fork New River	SR 1352	1
970917.1CM	*Orconectes* species B	South Fork New River	SR 1352	34
970917.2CM	*Orconectes* species B	South Fork New River	SR 1331	41
970917.2CM	*Cambarus chasmodactylus*	South Fork New River	SR 1331	2
970918.1CM	*Orconectes* species B	South Fork New River	US221/US421	25
970918.2CM	*Cambarus chasmodactylus*	South Fork New River	Western-most crossing of SR 1351	1
970918.2CM	*Orconectes* species B	South Fork New River	Western-most crossing of SR 1351	28
970918.3CM	*Orconectes* species B	South Fork New River	SR 1351	26
970918.3CM	*Orconectes* species B	South Fork New River	SR 1351	1

Figure 4. New River Basin Fish Survey Locations.



1	970918.1CM	17	970514.2CM
2	970917.2CM	18	970709.1CM
3	970918.2CM	19	970909.1CM
4	970917.1CM	20	970909.3CM
5	970918.3CM	21	970708.3CM
6	970909.5CM	22	970708.1CM
7	970908.1CM	23	970708.5CM
8	970530.2CM	24	970702.1CM
9	970530.1CM	25	970702.2CM
10	970530.3CM	26	970514.3CM 970702.3CM
11	970530.4CM	27	960717.2CM
12	970515.2CM	28	970415.2CM 970515.3CM 970825.1CM
13	970513.4CM	29	970528.1CM
14	970414.1CM 970515.1CM	30	970415.1CM 970528.2CM
15	970513.3CM		
16	970514.1CM		

Table 4. Fish sampling data from the New River Basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
960717.2CM	*Campostoma anomalum*	Central stoneroller	Elk Creek	NC 93	2
960717.2CM	*Etheostoma flabellare*	Fantail darter	Elk Creek	NC 93	4
970414.1CM	*Cyprinella spiloptera*	Spotfin shiner	South Fork New River	New River SP-Wagoner Road access area	1
970414.1CM	*Notropis* spp.		South Fork New River	New River SP-Wagoner Road access area	46
970415.1CM	*Notropis chiliticus*	Redlip shiner	South Fork New River	NC 18 at Little River	8
970415.1CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	NC 18 at Little River	1
970415.1CM	*Nocomis* sp.		South Fork New River	NC 18 at Little River	1
970415.1CM	*Notropis photogenis*	Silver shiner	South Fork New River	NC 18 at Little River	1
970415.1CM	*Etheostoma kanawhae*	Kanawha darter	South Fork New River	NC 18 at Little River	1
970415.2CM	*Cyprinella spiloptera*	Spotfin shiner	New River	SR 1345	8
970415.2CM	*Notropis coccogenis*	Warpaint shiner	New River	SR 1345	1
970415.2CM	*Notropis photogenis*	Silver shiner	New River	SR 1345	1
970415.2CM	*Nocomis* sp.		New River	SR 1345	1
970415.2CM	*Notropis rubellus*	Rosyface shiner	New River	SR 1345	24
970415.2CM	*Notropis leucioidus*	Tennessee shiner	New River	SR 1345	4
970513.3CM	*Exoglossum laurae*	Tonguetied minnow	South Fork New River	SR 1601	1
970513.3CM	*Nocomis* spp.		South Fork New River	SR 1601	20
970513.3CM	*Nocomis leptocephalus*	Bluehead chub	South Fork New River	SR 1601	3
970513.3CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1601	7
970513.3CM	*Ambloplites rupestris*	Rock bass	South Fork New River	SR 1601	1
970513.3CM	*Campostoma anomalum*	Central stoneroller	South Fork New River	SR 1601	1
970513.3CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	SR 1601	10
970513.3CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	SR 1601	6
970513.3CM	*Notropis* spp.		South Fork New River	SR 1601	21
970513.3CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1601	11
970513.3CM	*Rhinichthys cataractae*	Longnose dace	South Fork New River	SR 1601	4
970513.3CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1601	10
970513.4CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	Along SR 1589	7
970513.4CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	Along SR 1589	6
970513.4CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	Along SR 1589	16

Table 4 cont.. Fish sampling data from New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
970513.4CM	*Etheostoma kanawhae*	Kanawha darter	South Fork New River	Along SR 1589	4
970513.4CM	Misc. species		South Fork New River	Along SR 1589	12
970513.4CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	Along SR 1589	1
970513.4CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	Along SR 1589	1
970513.4CM	*Ambloplites rupestris*	Rock bass	South Fork New River	Along SR 1589	1
970514.1CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	New River SP-US 221 access area	6
970514.1CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	New River SP-US 221 access area	16
970514.1CM	*Phoxinus oreas*	Mountain redbelly dace	South Fork New River	New River SP-US 221 access area	1
970514.1CM	*Ambloplites rupestris*	Rock bass	South Fork New River	New River SP-US 221 access area	1
970514.1CM	Misc. species		South Fork New River	New River SP-US 221 access area	15
970514.1CM	*Etheostoma kanawhae*	Kanawha darter	South Fork New River	New River SP-US 221 access area	1
970514.1CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	New River SP-US 221 access area	3
970514.1CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	New River SP-US 221 access area	19
970514.1CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	New River SP-US 221 access area	8
970514.2CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	NRSP-US 221 access area, lower end	12
970514.2CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	NRSP-US 221 access area, lower end	11
970514.2CM	Misc. species		South Fork New River	NRSP-US 221 access area, lower end	9
970514.2CM	*Percina oxyrhyncus*	Sharpnose darter	South Fork New River	NRSP-US 221 access area, lower end	1
970514.2CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	NRSP-US 221 access area, lower end	1
970514.2CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	NRSP-US 221 access area, lower end	5
970514.3CM	*Cottus bairdi*	Mottled sculpin	New River	NRSP-Alleghany access area, lower end	32
970514.3CM	*Etheostoma blennioides*	Greenside darter	New River	NRSP-Alleghany access area, lower end	1
970514.3CM	*Ambloplites rupestris*	Rock bass	New River	NRSP-Alleghany access area, lower end	3
970514.3CM	*Percina gymnocephala*	Appalachia darter	New River	NRSP-Alleghany access area, lower end	13
970514.3CM	*Phenacobius teretulus*	Kanawha minnow	New River	NRSP-Alleghany access area, lower end	25
970514.3CM	*Etheostoma flabellare*	Fantail darter	New River	NRSP-Alleghany access area, lower end	70
970514.3CM	Misc. species		New River	NRSP-Alleghany access area, lower end	50
970514.3CM	*Percina caprodes*	Logperch	New River	NRSP-Alleghany access area, lower end	3
970514.3CM	*Salvelinus fontinalis*	Brook trout	New River	NRSP-Alleghany access area, lower end	1
970515.1CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	New River SP-Wagoner access area	10
970515.1CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	New River SP-Wagoner access area	4

Table 4 cont.. Fish sampling data from New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
970515.1CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	New River SP-Wagoner access area	9
970515.1CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	New River SP-Wagoner access area	24
970515.1CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	New River SP-Wagoner access area	10
970515.1CM	Misc. species		South Fork New River	New River SP-Wagoner access area	42
970515.1CM	*Salvelinus fontinalis*	Brook trout	South Fork New River	New River SP-Wagoner access area	1
970515.1CM	*Ambloplites rupestris*	Rock bass	South Fork New River	New River SP-Wagoner access area	10
970515.2CM	*Ambloplites rupestris*	Rock bass	South Fork New River	NC 88	6
970515.2CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	NC 88	2
970515.2CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	NC 88	2
970515.2CM	Misc. species		South Fork New River	NC 88	26
970515.2CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	NC 88	7
970515.2CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	NC 88	3
970515.3CM	*Cottus bairdi*	Mottled sculpin	New River	SR 1345	1
970515.3CM	Misc. species		New River	SR 1345	69
970515.3CM	*Percina oxyrhyncus*	Sharpnose darter	New River	SR 1345	1
970515.3CM	*Percina gymnocephala*	Appalachia darter	New River	SR 1345	7
970515.3CM	*Pylodictus olivaris*	Flathead catfish	New River	SR 1345	1
970515.3CM	*Etheostoma blennioides*	Greenside darter	New River	SR 1345	7
970515.3CM	*Etheostoma flabellare*	Fantail darter	New River	SR 1345	43
970515.3CM	*Ambloplites rupestris*	Rock bass	New River	SR 1345	3
970528.1CM	*Etheostoma blennioides*	Greenside darter	Little River	NC 18, 1/4 mile above bridge	2
970528.1CM	*Phenacobius teretulus*	Kanawha minnow	Little River	NC 18, 1/4 mile above bridge	1
970528.1CM	*Rhinichthys cataractae*	Longnose dace	Little River	NC 18, 1/4 mile above bridge	3
970528.1CM	Misc. species		Little River	NC 18, 1/4 mile above bridge	104
970528.1CM	*Etheostoma flabellare*	Fantail darter	Little River	NC 18, 1/4 mile above bridge	21
970528.1CM	*Etheostoma kanawhae*	Kanawha darter	Little River	NC 18, 1/4 mile above bridge	21
970528.1CM	*Hypentelium nigricans*	Northern hog sucker	Little River	NC 18, 1/4 mile above bridge	1
970528.2CM	*Hypentelium nigricans*	Northern hog sucker	Little River	NC 18	4
970528.2CM	*Salmo trutta*	Brown trout	Little River	NC 18	1
970528.2CM	*Rhinichthys cataractae*	Longnose dace	Little River	NC 18	2
970528.2CM	*Lepomis* sp.		Little River	NC 18	1

Table 4 cont.. Fish sampling data from New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
970528.2CM	*Etheostoma flabellare*	Fantail darter	Little River	NC 18	26
970528.2CM	*Phenacobius teretulus*	Kanawha minnow	Little River	NC 18	3
970528.2CM	Misc. species		Little River	NC 18	175
970528.2CM	*Etheostoma kanawhae*	Kanawha darter	Little River	NC 18	5
970528.2CM	*Etheostoma blennioides*	Greenside darter	Little River	NC 18	4
970530.1CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	SR 1181	1
970530.1CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1181	6
970530.1CM	*Hypentelium nigricans*	Northern hog sucker	South Fork New River	SR 1181	2
970530.1CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1181	15
970530.1CM	*Etheostoma kanawhae*	Kanawha darter	South Fork New River	SR 1181	4
970530.1CM	Misc. species		South Fork New River	SR 1181	21
970530.1CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1181	3
970530.2CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1179	1
970530.2CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1179	21
970530.2CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1179	9
970530.2CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	SR 1179	2
970530.2CM	Misc. species		South Fork New River	SR 1179	23
970530.2CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	SR 1179	2
970530.3CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	NC 163	1
970530.3CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	NC 163	4
970530.3CM	*Etheostoma kanawhae*	Kanawha darter	South Fork New River	NC 163	1
970530.3CM	Misc. species		South Fork New River	NC 163	2
970530.3CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	NC 163	1
970530.3CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	NC 163	1
970530.4CM	Misc. species		South Fork New River	SR 1222	26
970530.4CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1222	7
970530.4CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	SR 1222	4
970530.4CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1222	11
970530.4CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1222	11
970530.4CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	SR 1222	2
970702.1CM	*Etheostoma blennioides*	Greenside darter	New River	Oliver House downstream	1

Table 4 cont.. Fish sampling data from New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
970702.1CM	*Etheostoma flabellare*	Fantail darter	New River	Oliver House downstream	1
970702.1CM	*Percina caprodes*	Logperch	New River	Oliver House downstream	2
970702.2CM	*Percina caprodes*	Logperch	New River	New River SP-Alleghany access area	1
970702.3CM	*Percina caprodes*	Logperch	New River	NRSP-Alleghany access area, lower end	2
970702.3CM	*Percina gymnocephala*	Appalachia darter	New River	NRSP-Alleghany access area, lower end	1
970702.3CM	*Phenacobius teretulus*	Kanawha minnow	New River	NRSP-Alleghany access area, lower end	1
970702.3CM	*Etheostoma flabellare*	Fantail darter	New River	NRSP-Alleghany access area, lower end	10
970708.1CM	*Etheostoma blennioides*	Greenside darter	North Fork New River	SR 1573	1
970708.1CM	*Etheostoma flabellare*	Fantail darter	North Fork New River	SR 1573	45
970708.1CM	*Phenacobius teretulus*	Kanawha minnow	North Fork New River	SR 1573	4
970708.1CM	Misc. species		North Fork New River	SR 1573	116
970708.1CM	*Ambloplites rupestris*	Rock bass	North Fork New River	SR 1573	1
970708.1CM	*Cottus bairdi*	Mottled sculpin	North Fork New River	SR 1573	9
970708.1CM	*Percina gymnocephala*	Appalachia darter	North Fork New River	SR 1573	2
970708.3CM	*Phenacobius teretulus*	Kanawha minnow	North Fork New River	NC 16	7
970708.3CM	*Micropterus dolomieu*	Smallmouth bass	North Fork New River	NC 16	1
970708.3CM	*Etheostoma blennioides*	Greenside darter	North Fork New River	NC 16	2
970708.3CM	*Cottus bairdi*	Mottled sculpin	North Fork New River	NC 16	1
970708.3CM	*Ambloplites rupestris*	Rock bass	North Fork New River	NC 16	1
970708.3CM	*Etheostoma flabellare*	Fantail darter	North Fork New River	NC 16	8
970708.3CM	Misc. species		North Fork New River	NC 16	67
970708.5CM	*Micropterus dolomieu*	Smallmouth bass	North Fork New River	SR 1552	2
970708.5CM	*Etheostoma flabellare*	Fantail darter	North Fork New River	SR 1552	2
970708.5CM	*Rhinichthys cataractae*	Longnose dace	North Fork New River	SR 1552	4
970708.5CM	*Percina gymnocephala*	Appalachia darter	North Fork New River	SR 1552	2
970708.5CM	Misc. species		North Fork New River	SR 1552	2
970708.5CM	*Etheostoma blennioides*	Greenside darter	North Fork New River	SR 1552	1
970708.5CM	*Ambloplites rupestris*	Rock bass	North Fork New River	SR 1552	2
970708.5CM	*Cottus bairdi*	Mottled sculpin	North Fork New River	SR 1552	6
970709.1CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	SR 1549	6
970709.1CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	SR 1549	2

Table 4 cont.. Fish sampling data from New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
970709.1CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1549	2
970709.1CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1549	4
970709.1CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1549	27
970709.1CM	*Ambloplites rupestris*	Rock bass	South Fork New River	SR 1549	1
970709.1CM	Misc. species		South Fork New River	SR 1549	30
970825.1CM	*Percina caprodes*	Logperch	New River	SR 1345	1
970908.1CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1169	28
970908.1CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	SR 1169	13
970908.1CM	Misc. species		South Fork New River	SR 1169	33
970908.1CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	SR 1169	6
970908.1CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1169	40
970908.1CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1169	5
970909.1CM	*Etheostoma blennioides*	Greenside darter	North Fork New River	SR 1501	4
970909.1CM	*Etheostoma kanawhae*	Kanawha darter	North Fork New River	SR 1501	5
970909.1CM	Misc. species		North Fork New River	SR 1501	48
970909.1CM	*Phenacobius teretulus*	Kanawha minnow	North Fork New River	SR 1501	9
970909.1CM	*Oncorhynchus mykiss*	Rainbow trout	North Fork New River	SR 1501	1
970909.1CM	*Etheostoma flabellare*	Fantail darter	North Fork New River	SR 1501	151
970909.3CM	*Etheostoma flabellare*	Fantail darter	North Fork New River	SR 1513	100
970909.3CM	*Cottus bairdi*	Mottled sculpin	North Fork New River	SR 1513	1
970909.3CM	*Etheostoma blennioides*	Greenside darter	North Fork New River	SR 1513	1
970909.3CM	Misc. species		North Fork New River	SR 1513	12
970909.5CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1106	3
970909.5CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1106	10
970909.5CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	SR 1106	1
970909.5CM	*Etheostoma*		South Fork New River	SR 1106	3
970909.5CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1106	6
970909.5CM	*Ambloplites rupestris*	Rock bass	South Fork New River	SR 1106	2
970909.5CM	Misc. species		South Fork New River	SR 1106	34
970917.1CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1352	68
970917.1CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1352	1

Table 4 cont.. Fish sampling data from New River basin in North Carolina.

STATION(DATE)	SPECIES	COMMON NAME	WATERWAY	LOCATION	NUMBER
970917.1CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1352	105
970917.1CM	Misc. species		South Fork New River	SR 1352	18
970917.2CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	SR 1331	1
970917.2CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1331	73
970917.2CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1331	6
970917.2CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1331	158
970917.2CM	Misc. species		South Fork New River	SR 1331	46
970918.1CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	US221/US421	13
970918.1CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	US221/US421	8
970918.1CM	Misc. species		South Fork New River	US221/US421	134
970918.1CM	*Etheostoma kanawhae*	Kanawha darter	South Fork New River	US221/US421	4
970918.1CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	US221/US421	10
970918.1CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	US221/US421	1
970918.2CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	Western-most crossing of SR 1351	4
970918.2CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	Western-most crossing of SR 1351	48
970918.2CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	Western-most crossing of SR 1351	5
970918.2CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	Western-most crossing of SR 1351	21
970918.2CM	Misc. species		South Fork New River	Western-most crossing of SR 1351	41
970918.3CM	Misc. species		South Fork New River	SR 1351	15
970918.3CM	*Cottus bairdi*	Mottled sculpin	South Fork New River	SR 1351	36
970918.3CM	*Etheostoma blennioides*	Greenside darter	South Fork New River	SR 1351	7
970918.3CM	*Etheostoma flabellare*	Fantail darter	South Fork New River	SR 1351	63
970918.3CM	*Etheostoma kanawhae*	Kanawha darter	South Fork New River	SR 1351	2
970918.3CM	*Percina gymnocephala*	Appalachia darter	South Fork New River	SR 1351	3
970918.3CM	*Phenacobius teretulus*	Kanawha minnow	South Fork New River	SR 1351	1

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